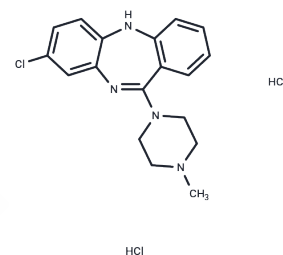


Clozapine dihydrochloride

Chemical Properties

CAS No. : 2711603-38-0
 Formula: C₁₈H₂₁Cl₃N₄
 Molecular Weight: 399.75
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	Clozapine (HF 1854) dihydrochloride is utilized for researching psychiatric disorders. This compound exhibits high affinity for numerous neuroreceptors and acts as an effective antagonist of dopamine receptors, with a K_i value of 75 nM. Clozapine inhibits the muscarinic M1 receptor and serotonin 5HT _{2A} receptor, with K_i values of 9.5 nM and 4 nM, respectively. Additionally, Clozapine is a selective agonist of the muscarinic M4 receptor ($EC_{50} = 11$ nM).
Targets(IC50)	5-HT Receptor, Adrenergic Receptor, AChR, Dopamine Receptor
In vitro	Clozapine (HF 1854) is a D ₂ receptor antagonist with a K_i of 75 nM, and it also blocks serotonin 5HT _{2A} receptors with a K_i of 4 nM, inhibits muscarinic M1 receptors with a K_i of 9.5 nM, and blocks α_2 -adrenergic receptors with a K_i of 51 nM. At concentrations of 0-1 μ M for 24 hours, Clozapine modulates receptor levels in HeLa cells by downregulating 5-HT ₆ and upregulating 5-HT ₇ receptors. It acts as a full agonist of muscarinic M4 receptors expressed in CHO cells, with an EC_{50} of 11 nM.
In vivo	Clozapine (HF 1854) administered at 25 mg/kg/day via intraperitoneal injection for 21 days exhibits antipsychotic effects in a mouse model of psychosis induced by lysergic acid diethylamide.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5016 mL	12.5078 mL	25.0156 mL
5 mM	0.5003 mL	2.5016 mL	5.0031 mL
10 mM	0.2502 mL	1.2508 mL	2.5016 mL
50 mM	0.050 mL	0.2502 mL	0.5003 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481